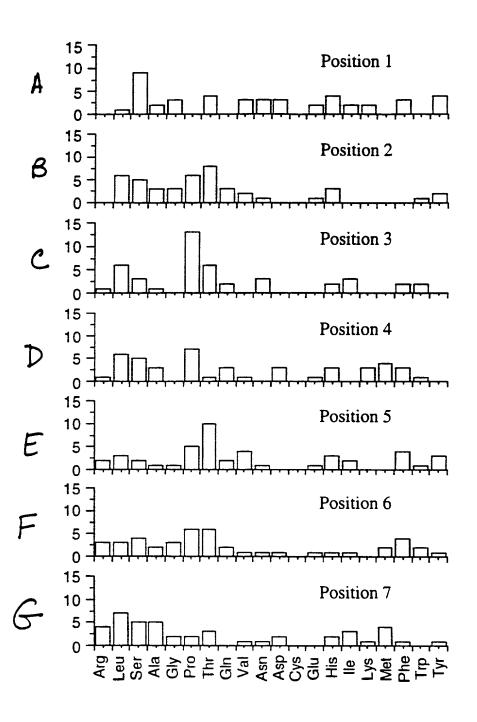
3092 0 (sheet 1 of 41)

Figure 1



309 6 (sheet 2 of L)

Sequences 1-40 (some did not sequence) panning 3 expt 1

His Thr Thr Val Tyr Gly Ala Gly CAT ACG ACT GTT TAT GGG GCT GGT

Thr Glu Thr Pro Tyr Pro Thr Gly ACT GAG ACG CCT TAT CCT ACT GGT

Leu Thr Thr Pro Phe Ser Ser Gly CTT ACT ACT CCG TTT TCG TCG GGT

Gly Val Pro Leu Thr Met Asp Gly GGT GTG CCT CTT ACG ATG GAT GGT

Lys Leu Pro Thr Val Leu Arg Gly AAG CTT CEG ACT GTT CTG CGG GGT

Cys Arg Phe His Gly Asn Arg Gly TGT CGC TTT CAT GGG AAT CGT GGT

Tyr Thr Arg Asp Phe Glu Ala Gly TAT ACT CGG GAT TTT GAG GCT GGT

Ser Ser Ala Ala Gly Pro Arg Gly TCG TCG GCG GCT GGT CCG CGG GGT

Ser Leu Ile Gln Tyr Ser Arg Gly TCT CTG ATT CAG TAT TCG AGG GGT

Asp Ala Leu Met Trp Pro UKN Gly GAT GCT CTT ATG TGG CCT NTG GGT

Ser Ser UKN Ser Leu.Tyr Ile Gly TCG TCT CNT TCG TTG TAT ATT GGT

Phe Asn Thr Ser Thr Arg Thr Gly TTT AAT ACT TCG ACG CGT ACG GGT

Thr Val Gln His Val Ala Phe Gly ACT GTG CAG CAT GTT GCT TTT GGT

Asp Tyr Ser Phe Pro Pro Leu Gly GAT TAT TCT TTT CCG CCT CTT GGT

Val Gly Ser Met Glu Ser Leu Gly GTG GGG TCT ATG GAG TCG TTG GGT

Phe UKN Pro Met Ile UKN Ser Gly

TTT CAN CCG ATG ATT NGN TCG GGT

Ala Pro Pro Arg Val Thr Met Gly GCG CCT CCG CGG GTT ACT ATG GGT

FIGURE 1H.

30° 26 (Sheet 3 of 41)

Ile Ala Thr Lys Thr Pro Lys Gly ATT GCT ACG AAG ACG CCT AAG GGT Lys Pro Pro Leu Phe Gln Ile Gly AAG CCT CCG TTG TTT CAG ATT GGT Tyr His Thr Ala His Asn Met Gly TAT CAT ACT GCT CAT AAT ATG GGT Ser Tyr Ile Gln Ala Thr His Gly TCT TAT ATT CAG GCT ACG CAT GGT Ser Ser Phe Ala Thr Phe Leu Gly TCG TCT TTT GCT ACT TTT CTT GGT Thr Thr Pro Pro Asn Phe Ala Gly ACG ACT CCG CCG AAT TTT GCG GGT Ile Ser Leu Asp Pro Arg Met Gly ATT TCT CTT GAT CCG CGT ATG GGT Ser Leu Pro Leu Phe Gly Ala Gly TCG CTG CCG CTG TTT GGT GCG GGT Asn Leu Leu Lys Thr Thr Leu Gly AAT CTT CTT AAG ACT ACG CTT GGT Asp Gln Asn Leu Pro Arg Arg Gly GAT CAG AAT CTG CCG CGG CGG GGT Ser His Phe Glu Gln Leu Leu Gly AGT CAT TTT GAG CAG CTG CTT GGT Thr Pro Gln Leu His His Gly Gly ACG CCG CAG CTT CAT CAT GGT GGT Ala Pro Leu Asp Arg Ile Thr Gly GCG CCT CTG GAT AGG ATT ACG GGT Phe Ala Pro Leu Ile Ala His Gly TTT GCG CCT CTT ATT GCG CAT GGT Ser Trp Ile TER Thr Phe Met Gly TCG TGG ATT TAG ACG TTT ATG GGT Asn Thr Trp Pro His Met Tyr Gly AAT ACT TGG CCT CAT ATG TAT GGT Glu Pro Leu Pro Thr Thr Leu Gly GAG CCT CTT CCG ACT ACG TTG GGT His Gly Pro His Leu Phe Asn Gly CAT GGG CCT CAT CTG TTT AAT GGT

1 H (cont.)

309. 6 (sheet 4 of 11)

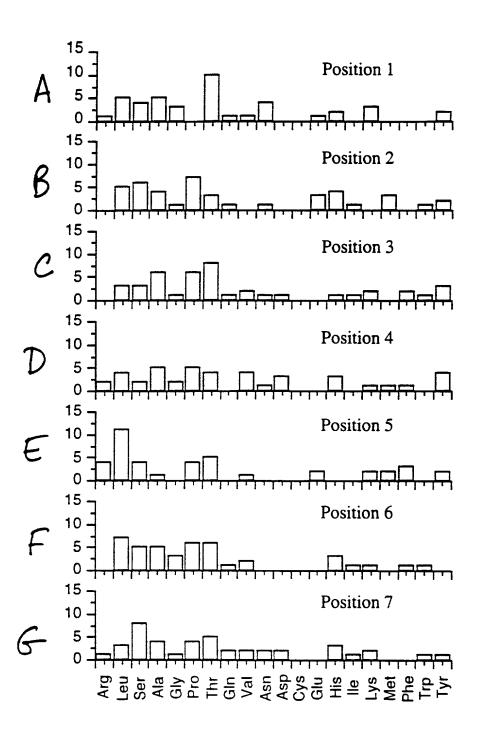
Tyr Leu Asn Ser Thr Leu Ala Gly TAT CTG AAT TCT ACG CTT GCT GGT

His Leu His Ser Pro Ser Gly Gly CAT CTT CAT AGT CCG TCG GGG GGT

1 H (cont)

309. 6 (Sheet 5 of .1-)

Figure 2



31726 (sheet 60 41)

Translated sequences 41-80 (not all sequenced) panning #3 expt #3

Thr Leu Pro His Arg Leu Asn Gly ACT CTG CCT CAT CGT CTG AAT GGT Ser Ser Pro Arg Glu Val His Gly TCG AGT CCG AGG GAG GTT CAT GGT Asn Gln Val Asp Thr Ala Arg Gly AAT CAG GTT GAT ACG GCT CGG GGT Tyr Pro Thr Pro Leu Leu Thr Gly TAT CCT ACG CCG CTG CTG ACT GGT His Pro Ala Ala Phe Pro Trp Gly CAT CCT GCT GCT TTT CCT TGG GGT Leu Leu Pro His Ser Ser Ala Gly CTT CTT CCG CAT TCT AGT GCT GGT Leu Glu Thr Tyr Thr Ala Ser Gly CTT GAG ACT TAT ACG GCT TCT GGT Lys Tyr Val Pro Leu Pro Pro Gly AAG TAT GTG CCT CTG CCG CCG GGT Ala Pro Leu Ala Leu His Ala Gly GCG CCG TTG GCT CTG CAT GCG GGT Tyr Glu Ser Leu Leu Thr Lys Gly TAT GAG TCG CTG CTG ACT AAG GGT Ser His Ala Ala Ser Gly Thr Gly TCT CAT GCG GCT TCT GGT ACT GGT Gly Leu Ala Thr Val Lys Ser Gly GGT TTG GCG ACT GTT AAG TCT GGT Gly Ala Thr Ser Phe Gly Leu Gly GGT GCT ACG TCT TTT GGG CTT GGT Lys Pro Pro Gly Pro Val Ser Gly AAG CCG CCT GGG CCG GTG TCG GGT Thr Leu Tyr Val Ser Gly Asn Gly ACT CTT TAT GTT TCT GGG AAT GGT His Ala Pro Phe Lys Ser Gln Gly CAT GCT CCG TTT AAG TCT CAG GGT Val Ala Phe Thr Arg Leu Pro Gly GTG GCG TTT ACG CGG CTT CCG GGT

FIGURE 2H.

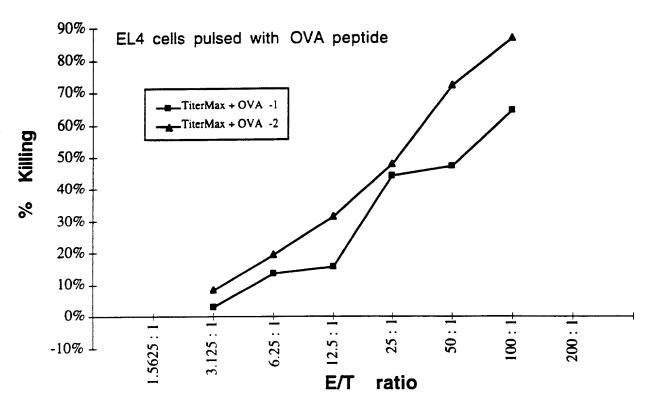
= 3926 (sheet 7 F 41)

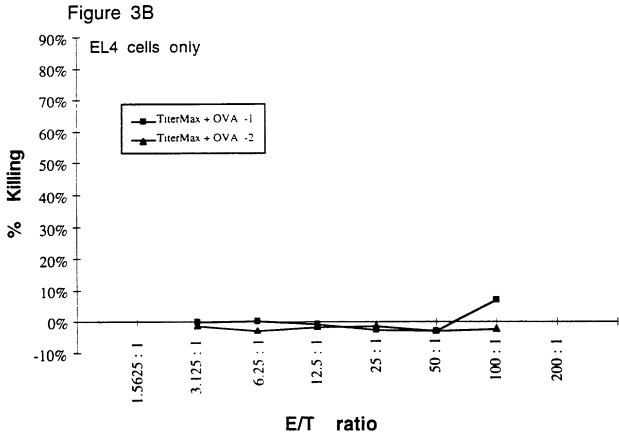
Leu Pro Thr Arg Thr Pro Ala Gly CTG CCG ACT CGT ACG CCG GCT GGT Ala Ser Phe Asp Leu Leu Ile Gly GCG AGT TTT GAT CTT TTG ATT GGT Arg Met Asn Thr Glu Pro Pro Gly CGG ATG AAT ACT GAG CCT CCG GGT Lys Met Thr Pro Leu Thr Thr Gly AAG ATG ACT CCT CTG ACG ACT GGT Ala Asn Ala Thr Pro Leu Leu Gly GCG AAT GCG ACG CCT CTG CTG GGT Thr Ile Trp Pro Pro Pro Val Gly ACT ATT TGG CCT CCG CCT GTT GGT Gln Thr Lys Val Met Thr Thr Gly CAG ACT AAG GTG ATG ACG ACG GGT Asn His Ala Val Phe Ala Ser Gly AAT CAT GCT GTT TTT GCT AGT GGT Leu His Ala Ala UKN Thr Ser Gly CTG CAT GCG GCT ANT ACG TCG GGT Thr Trp Gln Pro Tyr Phe His Gly ACG TGG CAG CCG TAT TTT CAT GGT Ala Pro Leu Ala Leu His Ala Gly GCG CCG TTG GCT CTG CAT GCG GGT Thr Ala His Asp Leu Thr Val Gly ACG GCG CAT GAT CTG ACT GTT GGT Asn Met Thr Asn Met Leu Thr Gly AAT ATG ACT AAT ATG CTT ACT GGT Gly Ser Gly Leu Ser Gln Asp Gly GGT TCT GGG CTG TCT CAG GAT GGT Thr Pro Ile Lys Thr Ile Tyr Gly ACG CCG ATT AAG ACG ATT TAT GGT Ser His Leu Tyr Arg Ser Ser Gly TCG CAT CTG TAT CGT TCT AGT GGT

2H (cont)

= 2926 (sheet 8 4 41)

Figure 3A





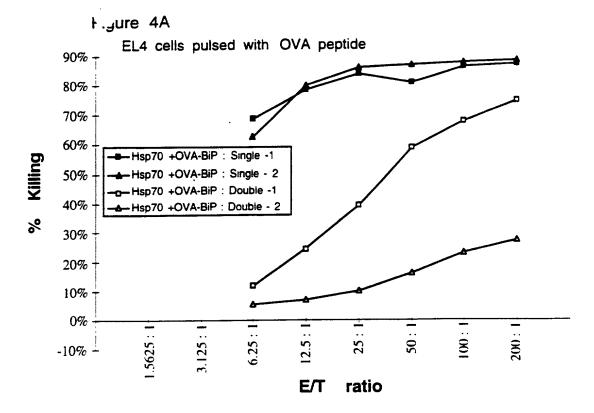
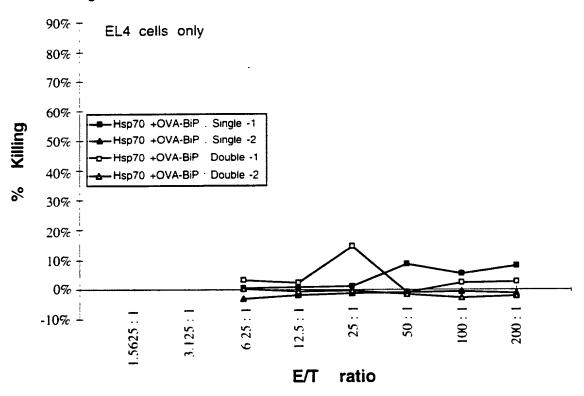
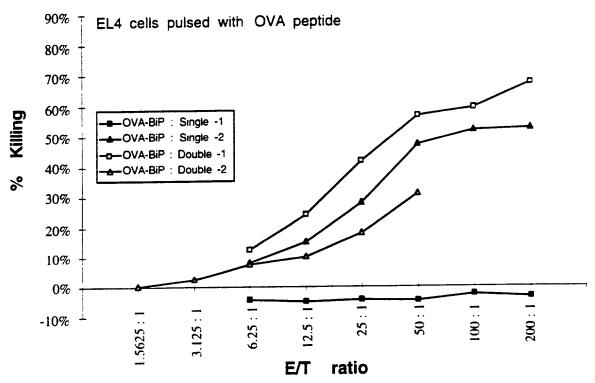


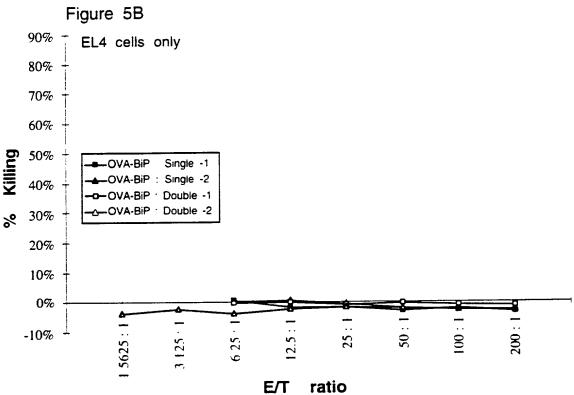
Figure 4B



30926 (sheet 9 of 41)

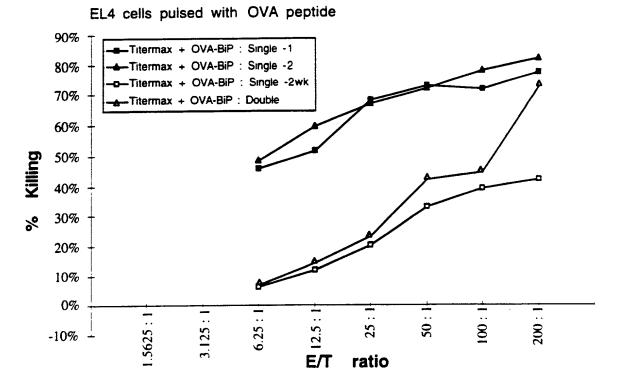
Figure 5A





30926 (sheet 100+41)

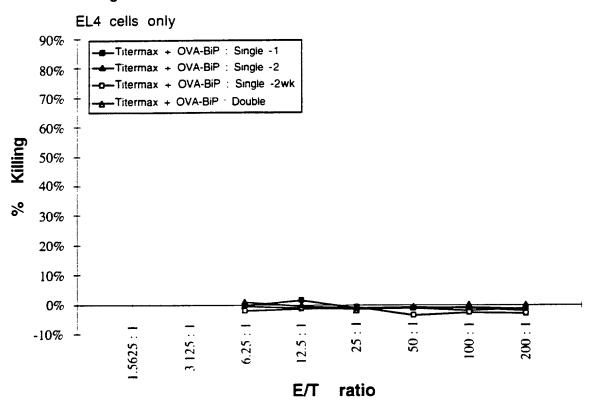
Figure 6A



ratio

Figure 6B

-10% -



30926 (sheet 11 of 41.)

30926 (Sheet 12 c. 41)

Peptide Only Immunizations

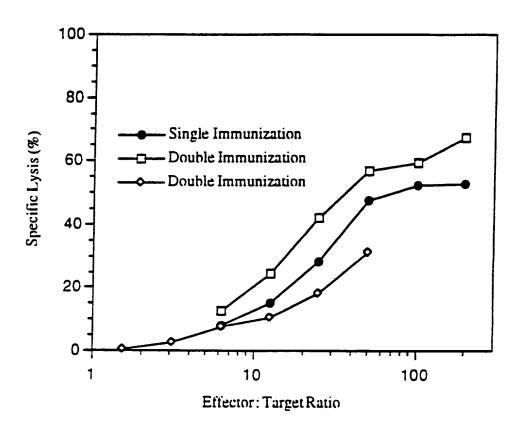
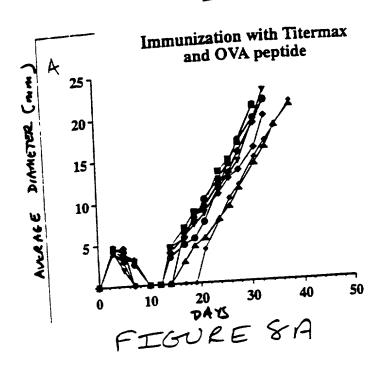


FIGURE 7

30 26 (sheet 1: of 41)



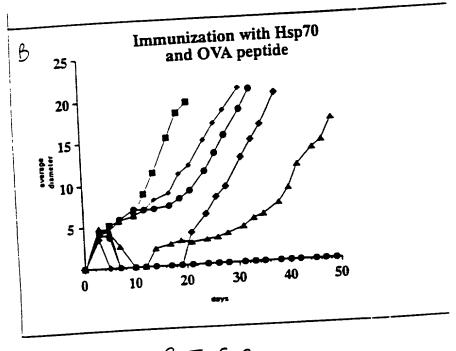


FIGURE 8B

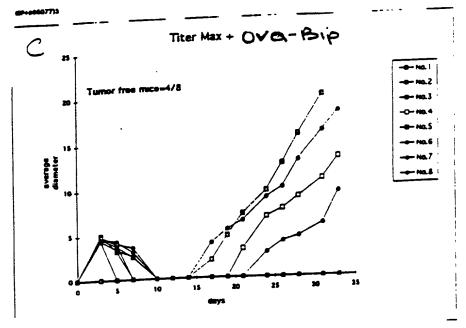
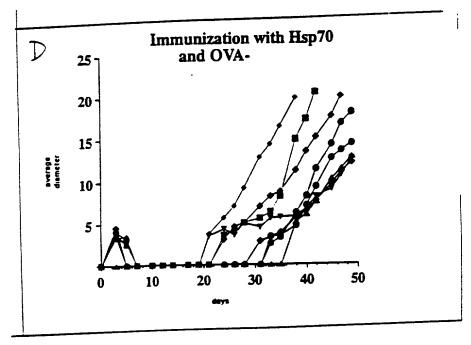
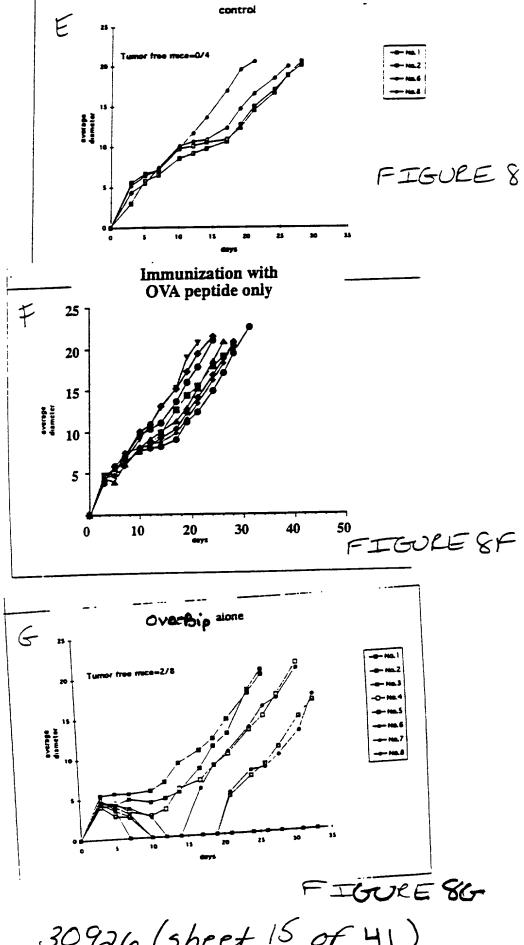


FIGURE 8C



5 FIGURE 8D



30926 (sheet 15 of 41)

30926 (sheet 16 of 41.)

THE AVERAGE DELAY OF ONSET OF TUMOR GROWTH

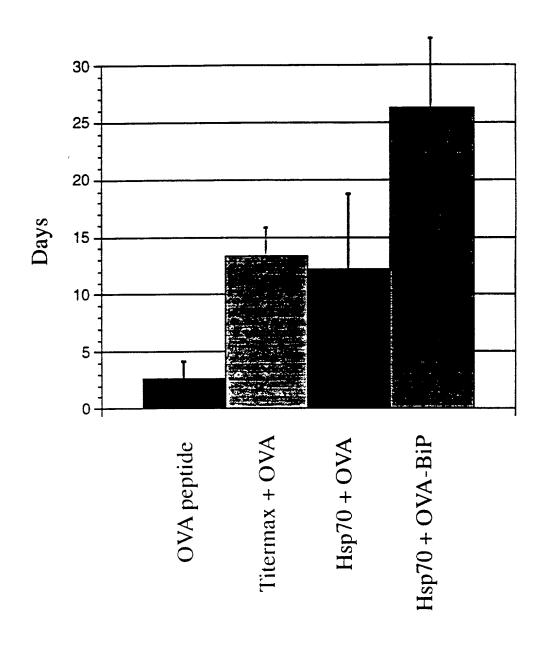


FIGURE & (H)

30926 (Sheef, 17 OF 41)

J0926 (sheet 1. of .41)

FIGURE 9B

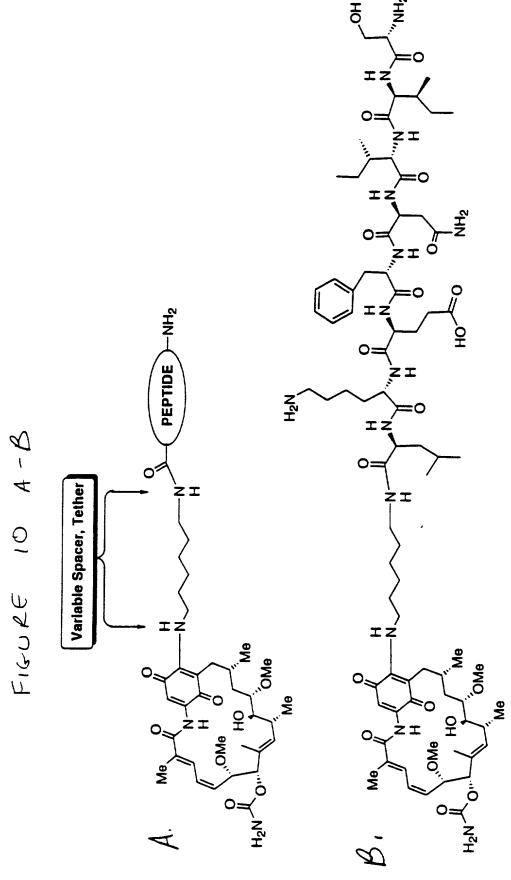
- 3926 (sheet , of 41)

FIGURE 9C.

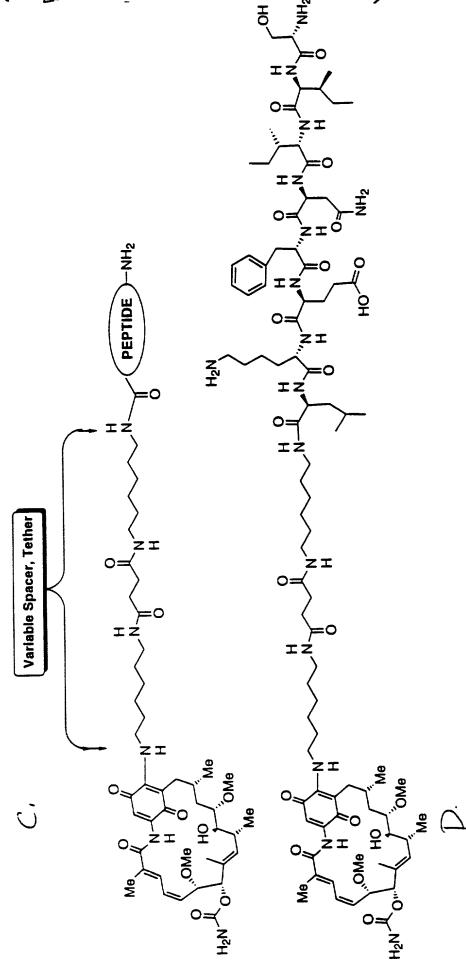
FIGURE 9D.

17-aminohexylamino HA

Herbimycin A, HA



FIGURE



PEPTIDE PEPTIDE SPACER LINKER Ĭ.

FIGURE 10 E.

30926 (Sheet 24 of 41)

FIGURE 11 A + B

3926 (sheet 2 of 41)

3092 (11) CENTER TO THE TOTAL TILL

FIGURE 12,

30926 (Sheeters of 41.)

FIGURE 13 A

PyBop (2.5 eq.), DIPEA (5 eq.) DMF, 11, 45 min

Boch

FIGURE 13.B.

Fully Protected Peptide

(-14 70 76 tashe) UBPPE

Boc-Ser (O'Bu)-OH (2.5 eq.) PyBop (2.5 eq.), DIPEA (5 eq.) DMF, π, 45 min

Fully Protected Peptide

FIGURE 14A

(·17 to 08 to 245) 97608

14 16

a)1% TFA, CH₂Cl₂, 2 min, rt b) Pyridine, methanol (1: 9) c) purification FIGURE Fully Protected Peptide ZZ

(-14 to 18 to 745) 08008

(IH 705. tooks) 2680°,

FIGURE 16 A.

20% piperidine DMF, 30 min., rt

XX

DMF, rt, 5 min. b) peptide with terminal amine free

(14 to E \$2342) 069(3

(Ih to hi +2245) 786.8

3. 936 (5heet 3. of 41.)

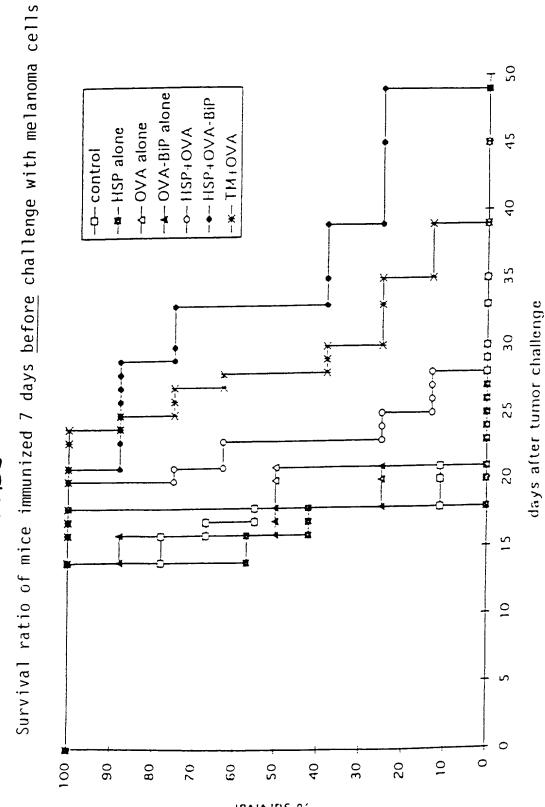
37926 (5heef 3, 0f 41)

IZ FIGURE H_2N IZ OMe ΙŻ . 9

(-14 to re 6372) 2590E

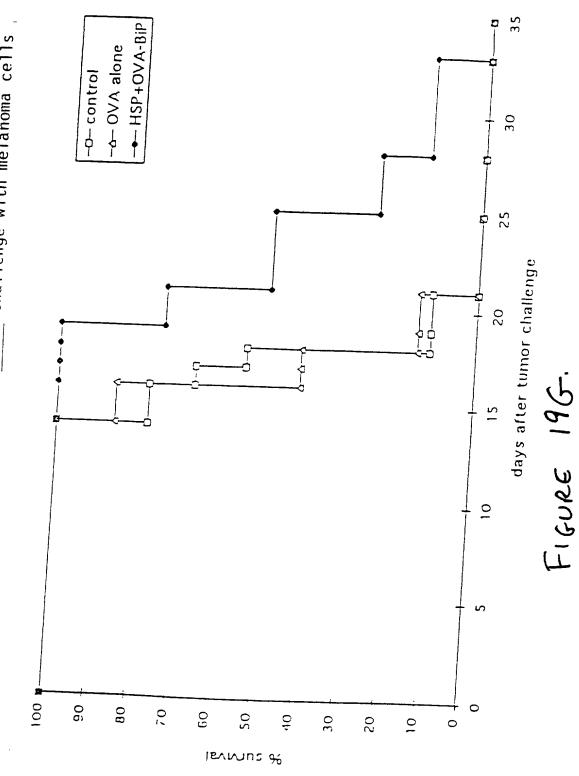
(14 to : f3245) 08:28

FIGURE 19 F.



(14 to 04 to 242) 029 JE

Survival ratio of mice immunized 7 & 14 days <u>after</u> challenge with melanoma cells



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